

ABSTRACT

An active layer side silicon wafer is heat-treated in an oxidizing atmosphere to thereby form a buried oxide film therein. The active layer side silicon wafer is then bonded to a supporting side wafer with said buried oxide film interposed therebetween thus to fabricate an SOI wafer. Said oxidizing heat treatment is carried out under a condition satisfying the following formula:

$$[O_i] \leq 2.123 \times 10^{21} \exp(-1.035/k(T+273)),$$

where, T is a temperature of the heat treatment, and $[O_i]$ (atmos/cm³) is an interstitial oxygen concentration.